REMARKS

Status of Claims

Claims 1-21 are pending. Claims 1 and 18 are currently amended.

Amendment to the Specification

Applicant respectfully requests the Examiner to consider the amendments to the specification submitted on May 3, 2007.

Rejections under 35 U.S.C. §102(e) as anticipated by SEIDEL et al (US 6,658,005) and under 35 U.S.C. §103(a) as unpatentable over SEIDEL et al in view of Persson et al (US 6421803)

Applicant amends claims 1 and 18. Support for the amendment can be found in the specification on page 4, lines 1-6.

Amended claims 1 and 18 are allowable because they overcome the rejections under the cited prior art. The reference, SEIDEL, in view of Persson, neither alone nor in combination, explicitly nor implicitly, discloses, anticipates, suggests, teaches or renders obvious all of the features of the claims.

According to the Advisory Action (mailed on June 1, 2007), the Examiner relies on the IEEE definition of physical layer including processing signals that are received from the medium for sending to the MAC, to assert that one of ordinary skill in the art would have recognized that the physical layer would have been responsible for the reception and decoding of data according to the IEEE standard terms dictionary definition of physical layer. However, SEIDEL, in view of Persson, and further in view of the IEEE definition does not disclose a HARQ controller that performs an operation of a MAC layer.

Furthermore, SEIDEL merely discloses a hybrid ARQ method for packet date transmission wherein previously transmitted packets are combined with retransmitted packets where the object is to provide a HARQ method with less signaling overhead and low implementation complexity (see col 2, lines 21-23). This disclosure is not even remotely disclose Applicants' claimed unique features.

Based upon these cited portions of SEIDEL, it is not seen how SEIDEL et al. could anticipate a *physical layer for receiving the control message and the data from the control channel and the data channel respectively and for decoding the received control message and data*, as recited in claim 1. More specifically, the cited portions of SEIDEL and surrounding

text are discussing aspects of SEIDEL relate to transmission and not reception. For example, column 2 lines 26-28 include the word "transmitted." Further, column 7 line 50 clearly identifies passing something to the physical layer for "transmission."

Still further, the Examiner does admit that SEIDEL does not disclose *a physical layer's HARQ controller* and asserts that it is an inherent element based on SEIDEL's disclosure. Applicants maintain that this unique feature is not inherent from SEIDEL's disclosure. Specifically, while SEIDEL et al. makes reference to the term "physical layer," SEIDEL et al. in no way teaches or suggests that the physical layer either receives or decodes a control message and data. SEIDEL does not teach, disclose or suggest, explicitly or implicitly, *a physical layer's HARQ controller for processing a result of the decoding of at least one of the received control message and data and for controlling the physical layer according to a result of the processing.* The Examiner relies on the IEEE definition to show that the missing elements of SEIDEL were inherent. However, Applicants submit that the IEEE definition does not support an assertion of inherency is improper for a rejection under 35 USC § 102. For a proper rejection under 35 USC § 102, each and every claim must either be disclosed or be inherent. In this case, the Examiner admits that the elements are not taught by SEIDEL. Applicants, on the other hand, submit that the elements are not inherent based on SEIDEL's disclosure. The mere fact that the Examiner admits that SEIDEL does not teach an element coupled with a secondary reference necessarily implies that the rejection under 35 USC § 102 is improper and unwarranted.

Applicants submit that the Examiner has acknowledged that the HARQ controller is in a physical layer and not taught in the prior art. The prior art merely discloses a HARQ controller that is in a MAC layer, not in a physical layer, whereas the Applicants' claims describe the operations of HARQ in a physical layer, which are not suggested in the prior art. For example, in Fig. 2 of this application, the functions in a MAC layer can be performed by using software, such as program, whereas functions in a physical layer may require operations such as exact timing and performance in response to the request from the system. The claims describe a physical layer's HARQ controller. One of ordinary skill in the art would not have considered that the operations of a HARQ controller perform in a physical layer, nor would it have been obvious at the time of the invention.

Furthermore, the Examiner attempts to cure SEIDEL's deficiencies by asserting the Persson reference under 35 USC § 103(a). The Applicants respectfully traverse this rejection. Persson merely teaches a method for performing error detection on received data

packets and error correction on only those data packets that were received in error without the need for retransmission of data packets. See Persson, Abstract section. The Examiner cited col 4, lines 48-52 which discloses a physical layer of the transmitter to transmit DUs containing the data over communications channel to the receiver, the communications channel between the transmitter and receiver used to transmit the data may introduce a number of errors into the transmitted data. However, this teaching does not disclose any part of Applicants' claimed features. It is unclear which claim limitation the Examiner is attempting to reject using Persson's disclosure. The Applicants assume that the Examiner is using Persson to make up for SEIDEL's explicit deficiencies and teach a physical layer's HARQ controller. If so, the Applicants assert that Persson's disclosure merely teaches physical layer of the transmitter, but fails to disclose features associated with a physical layer's HARQ controller as uniquely described in claim 1.

Applicants further submit that the Examiner has not established proper motivation for the combination of SEIDEL and Persson. Specifically, it is not seen how one of ordinary skill in the art would have been motivated to combine SEIDEL and Persson by the data units of SEIDEL et al. needing to be decoded. Accordingly, should the Examiner maintain the rejection the Examiner is respectfully requested to articulate in detail how the data units of SEIDEL et al. needing to be decoded motivates the combination of SEIDEL et al. and Persson teachings.

Accordingly, claims 1 and 18 are allowable.

Claims 2-17 and 19-21 are allowable at least because they depend on allowable base claims 1 and 18.

In all, the Applicants request the examiner to withdraw the rejections under SEIDEL and Persson for claims 1-21, and allow these claims.

Conclusion

In view of the above, it is believed that the above-identified application is in condition for allowance, and notice to that effect is respectfully requested. Should the Examiner have any questions, the Examiner is encouraged to contact the undersigned at the telephone number indicated below.

If any other fees are required, the Patent Office is authorized to charge any fees required by this submission to Deposit Account No. 18-2220.

Respectfully submitted,

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